



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,683	02/01/2002	Randolph D. Schueller	065095.0159	3103

7590 01/28/2004

CLAUDE E. COOKE, JR  
BAKER & BOTTS LLP  
ONE SHELL PLAZA  
910 LOUISIANA STREET  
HOUSTON, TX 77002-4995

EXAMINER

BERCK, KENNETH A

ART UNIT PAPER NUMBER

2879

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/683,683

Applicant(s)

SCHUELLER ET AL.

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6 and 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Vieland et al. (US 4323813).

Regarding claim 1, Vieland discloses (figs 1 and 2) an apparatus with a cap (22) including an aperture and configured to allow an electron to pass along an electron path through the aperture, a cover assembly (42) including a cover adjacent to the aperture configured to lie along the electron path during at least one point in time.

Regarding claim 2, Vieland discloses (fig 1 and 2) the cover assembly further comprises means for displacing the cover (springs, 60).

Regarding claim 3, Vieland discloses (fig 1 and 2) the cover assembly further comprises a spring (60).

Regarding claim 6, Vieland discloses (fig 1 and 2) the cover assembly further comprises a material comprising an end (50), wherein the end is fastened to the spring (60).

Regarding claim 9, Vieland discloses the cover assembly further comprises a cover guide (12) in contact with the cover.

Art Unit: 2879

Regarding claim 10, Vieland discloses the cover comprises stainless steel (Column 6, pages 30-34).

Regarding claim 11, Vieland discloses the cover comprises an insulator (56).

Regarding claim 12, Vieland discloses (figs 1 and 2) an electron gun with a cap assembly comprising a cap (22), a cap aperture, a cover (42) and a spring (60) wherein the cover overlies (to lie over or on) the cap aperture during at least one point in time and the spring comprises a first end attached to the cover and a second end attached to the cap and a focus electrode (20) spaced apart and electrically insulated from the cap assembly and comprising a focus aperture in alignment with the cap aperture.

Regarding claim 13, Vieland discloses the cap assembly (plate 50) comprises stainless steel (Column 6, pages 30-34).

Regarding claim 14, Vieland discloses the cover comprises stainless steel (Column 6, pages 30-34).

Regarding claim 15, Vieland discloses the cover comprises an insulator (56).

Regarding claim 16, Vieland discloses the cap further comprises a cover guide (12) in contact with the cover.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2879

Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vieland et al. (US 4323813) in view of Hunter (US 5075588).

Vieland discloses all of the above claim limitations but fails to clearly point out the spring being made of stainless steel.

Hunter discloses (column 6, lines 4-13) the spring being made of stainless steel in order to withstand operating temperature and because it is resilient and deformable without permanently retaining its deformed shape.

Hence it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the apparatus of Vieland with the spring being made of stainless steel in order to withstand operating temperature and because it is resilient and deformable without permanently retaining its deformed shape, as taught by Hunter.

Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vieland et al. (US 4323813) in view of Miyazawa et al. (US 4451242).

Regarding claim 5, Vieland discloses all of the above claim limitations but fails to clearly point out a means for releasing the spring.

Miyazawa discloses (column 6, lines 25-50) a means for releasing the spring in order to allow the shadow mask to be held by the support member.

Hence it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the apparatus of Vieland with a means for releasing the spring in order to allow the shadow mask to be held by the support member.

Art Unit: 2879

Regarding claim 8, Vieland discloses all of the above claim limitations but fails to clearly point out an actuator.

Miyazawa discloses (column 6, lines 25-50) an actuator for releasing the spring in order to allow the shadow mask to be held by the support member.

Hence it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the apparatus of Vieland with an actuator for releasing the spring in order to allow the shadow mask to be held by the support member.

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab

  
**ASHOK PATEL**  
**PRIMARY EXAMINER**